



PRODUCT DATA SHEET

Edition 03.2019/v1
CSC Master Format™ 09 67 00 (09 96 00)
FLUID-APPLIED FLOORING

Sikafloor® Duochem-6001

WATER-BASED, EASY TO CLEAN, EPOXY COATING WITH WEAR AND MILD CHEMICAL RESISTANCE FOR FLOORS, WALLS AND CEILINGS

Description	Sikafloor® Duochem-6001 is a two-component, epoxy emulsion suitable for application onto floors, walls and ceilings, plus machinery and equipment. It cures to provide a tough, finely textured, semi-gloss and coloured finish which will withstand light or moderate trafficking, chemical exposure and cleaning.
Where to Use	<ul style="list-style-type: none"> As a interior coating for surfaces in chemical, pharmaceutical and food processing and preparation facilities, warehouses and workshops which require coating whilst normal operations continue. Use on floors, walls, ceilings and machinery where a semi-gloss, wear resistant finish is needed, which will withstand contact with mildly corrosive chemicals and scrubbing during wash- down. As a thin -film, vapour permeable sealer on concrete above, on, or below grade.
Advantages	<ul style="list-style-type: none"> Water-based, ideal for interior application without disruption to ongoing operations. Able to withstand light or moderate traffic (i.e. pedestrians and pneumatic tires). Good resistance against mild corrosive chemicals, wear factors and scrubbing while being cleaned. Permeable to water vapour – suitable for application for above-, on- and below-grade. Canadian Food Inspection Agency (CFIA) acceptance. Potential for LEED® credit

Technical Data

Packaging	18.9 L (5 US gal.) units
Colour	RAL 7012 Basalt Grey, RAL 7046 Telegrey 2 Special colours available on request.
Yield	<p>Primer</p> <p>Concrete: Sikafloor® Duochem-6001 (dilute with 5 % clean water) 5 - 7.4 m²/L (200 - 300 ft²/US gal.) (2 - 3 mils d.f.t. / 5 - 8 mils w.f.t.) per coat.</p> <p>Metal: Sikagard® Cor-Pro-470 (universal metal primer) 10 m²/L (407 ft²/US gal.) (2 mils d.f.t. / 5 mils w.f.t.) per coat.</p> <p>Block: Sikagard® Duroplast EE (two part blockfiller) 1.2 - 2.0 m²/L (50 - 80 ft²/US gal.) (16 - 10 d.f.t. / 33 - 20 mils w.f.t.) per coat</p> <p>Gyproc®: Sikafloor® Duochem-6001 (diluted 5 %) or Sikagard® Duroplast PS (sealer) 5 - 8 m²/L (200 - 325 ft²/US gal.) (5 - 8 mils d.f.t. / 14 - 37 mils w.f.t.) (dependent upon product selected) per coat</p> <p>Top Coat</p> <p>Sikafloor® Duochem-6001 (unthinned) 5 - 7.4 m²/L (200 - 300 ft²/US gal.) (2-3 mils d.f.t.) per coat. Two (2) coats recommended for optimum service.</p> <p>Actual coverage rates and material consumption will depend upon porosity and profile of substrates. Allowance must be also made for variation in film thickness or number of coats required to achieve complete coverage of surfaces. Test sections are recommended to establish correct coverage.</p>
Shelf Life	1 year in original, unopened packaging. Store and transport dry at temperatures between 5 and 32 °C (41 and 89 °F). Protect from freezing and high temperatures; discard if frozen. Condition product at temperatures between 18 and 30 °C (65 and 86 °F) before using.
Mix Ratio	A:B = 3:1 by volume
Properties at 23 °C (73 °F) and 50 % R.H.	
Solids Content	
By volume	Approx. 37 %
By weight	50 %
Pot Life, 250 g (8.8 oz)	2 hours
Drying Times	
Touch dry	8 hours
Recoat time (min./max.)	8 / 72 hours
Full cure	7 days
<i>Drying times will vary according to air and substrate temperature and humidity.</i>	
Permeance ASTM E96	13.6 perms @ 4 mils dry
Water – Procedure B - Water	7.7 perms @ 6 mils dry

Abrasion Resistance ASTM D4060	
Taber Abraser, CS-17 Wheel/ 1000 g (2.2 lb)/1000 cycles	187 mg loss (Masonite substrate)
Direct Impact Resistance	
1- Cement Asbestos Board CGSB 1-GP-71 (147.1)	Unaffected at 0.7 J (6 lb/in)
2- Galvanized phosphatized steel ASTM D3029	6.2 J (55 lb/in)
Scrubability CGSB 1-GP-71 (125.1) 10,000 cycles	Unaffected
Gloss before and after 10 000 cycle scrubbability ASTM D523	No loss
Adhesion on concrete ASTM D4541	> 2 MPa (> 300 psi) (Substrate failure)
Adhesion on galvanised phosphatized steel ASTM D4541	2.1 MPa (300 psi)
Fire Rating CAN/ULC S 102.2	
Flame spread	6
Smoke developed	7
Static Coefficient of Friction ASTM C1028 15.3 cm/minute	
Dry surface	0.80
Wet surface	0.66
VOC Content	99 g/L (regular grade)
Chemical Resistance	Consult Sika Canada
<i>Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.</i>	

HOW TO USE

Surface Preparation

General: Surfaces must be clean, sound and frost-free, with contaminants detrimental to bond removed. Substrates may be damp where applying water-based coatings but optimum penetration and adhesion is achieved on dry surfaces.

Concrete: The concrete surface must be dry, clean and sound. Remove any dust, laitance, oil, dirt, curing agent, impregnations, wax, foreign matter, coatings and disintegrated material from the surface by any appropriate mechanical means, in order to achieve a profile equivalent to ICRI / CSP 3 - 4 for floors or ICRI / CSP 2 - 3 for walls. The compressive strength of the substrate should be at least 25 MPa (3625 psi) at 28 days and at least 1.5 MPa (218 psi) in tension at the time of application of primers or finish.

Metal: Prepare steel substrates by appropriate mechanical means, such as abrasive blast-cleaning or mechanical wire brushing, in order to achieve clean white metal profile equivalent to SSPC-SP10, Near White Metal, 2 to 4 mils anchor profile and apply primer immediately, before oxidation of the steel occurs.

Coatings: Epoxy or polyurethane coatings that have exceeded their overcoating time must be sanded to remove all gloss and solvent wiped.

Mixing

Pre-stir each component to ensure all soft settling is dispersed, solids are evenly distributed and even colours and consistencies are achieved within each component.

Where supply format permits, empty component B into A or, in the ratio of 3:1 by volume Component A: Component B, empty material into a suitably sized and clean mixing vessel and thoroughly mix for five (5) minutes using a low-speed drill (300 - 450 rpm) and *Exomixer*[®]-type mixing-paddle (recommended model). To minimize entrapping air, ensure mixing paddle is kept in the material. During the mixing operation, scrape down the sides and bottom of the pail with a flat or straight-edge trowel at least once to ensure thorough mixing. Sikafloor[®] Duochem-6001 should be uniform in colour and consistency before use. Mix only the quantity you can use within its pot life.

Note: Leave mixed material to induct for 30 minutes. This waiting time must be observed and following such, material must be re-mixed.

Application

Apply primers or block fillers in accordance with respective Product Data Sheets, observing use of correct equipment, techniques, coverages and waiting times before overcoating.

Apply Sikafloor[®] Duochem-6001 using a natural bristled brush, high quality, short nap roller (lint-free), or spray equipment. Thinning is not recommended unless when using material as a primer. Waiting time between coats will be approx 8 hours dependent upon temperatures. Observe the recommended film thicknesses and coverage rates, ensuring that sufficient coverage and opacity are achieved in each coat.

Clean Up

Clean all tools and equipment immediately after use with water. Once hardened, the product can only be cleaned mechanically. Wash soiled hands and skin thoroughly in hot, soapy water or use Sika[®] Hand Cleaner towels.

Limitations

- For interior use only; not suitable for exterior applications.
- Minimum substrate temperature should be 13 °C (61 °F) prior to application.
- Minimum age of concrete must be 28 days depending on curing and drying conditions.
- May be incompatible with certain existing coatings. Consult with Sika Canada for guidance before specifying or application and carry out trial sections.
- Product is sensitive to freezing during storage, transport and application.
- Do not hand-mix Sikafloor® materials, mechanical mix only.
- At low temperatures and/or under high humidity conditions, curing times will be extended.
- Not recommended for use on surfaces which are exposed to highly corrosive chemicals or heavy wear.
- Surface may discolour and yellow, especially white or similarly light shades, in areas subject to constant ultra-violet light.

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent SAFETY DATA SHEET containing physical, ecological, toxicological and other safety-related data.

KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL USE ONLY

The Information, and in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions, within their shelflife. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request or may be downloaded from our website at: www.sika.ca

SIKA CANADA INC.**Head Office**

601, avenue Delmar
Pointe-Claire, Quebec
H9R 4A9

Other locations

Toronto
Edmonton
Vancouver

1-800-933-SIKA
www.sika.ca

Certified ISO 9001 (CERT-0102780)
Certified ISO 14001 (CERT-0102791)